

Page 4, delete the whole paragraph starting in line 8 and replace it with the following new paragraph:

The preparatory station can comprise a gas ionizer to ionize the gas used to create the gas bearing. By using the gas ionizer the substrate can be gradually discharged from any initially charged state (since a statically charged part of the substrate will attract ions with an opposite charge, so that the charged part will be neutralized by the ions). This gradual discharging is advantageous, because it prevents a sudden discharge of the substrate, e.g. if it comes into the neighborhood of a conductor. A sudden discharge, for example with a spark, can cause damage to the substrate or to the sensitive structures already created thereon. As will be appreciated by one of ordinary skill in the art, the gas ionizer can, for example, employ radioactive ionization or corona discharge to ionize the gas; corona discharge in a method applying a high voltage to a sharp point to ionize the gas in the vicinity of the point.

Page 4, delete the whole paragraph starting in line 19 and replace it with the following new paragraph:

The intermediate table can comprise a first controller to control the temperature of that table. By controlling temperature of the intermediate table, the temperature of the substrate can be influenced. A first possible mechanism for effecting such influence can be thermal radiation from the substrate to the intermediate table. A second mechanism can be that the temperature of the intermediate table influences the temperature of the gas used in the gas bearing, and the temperature of the gas influences the temperature of the substrate. Especially when the gap caused by the gas bearing between the substrate and the surface of the intermediate table is very thin, the temperature of said table can have a strong and rapid influence on the temperature of the substrate.

Page 4, delete the whole paragraph starting in line 28 and replace it with the following new paragraph:

The preparatory station can comprise a second controller to regulate the temperature of the gas used in the gas bearing. By directly regulating the temperature of said gas, the temperature of the substrate can be influenced as well. Especially when the gap between the substrate and the intermediate table is large, it may be desirable to regulate the temperature of the gas directly instead of by regulating only the temperature of the intermediate table.



Page 9, delete the whole paragraph starting in line 28 and replace it with the following new paragraph:

B4  
The substrate 1 will be moved to the intermediate table 5 by a substrate transporter, e.g. a robot arm. In general, the substrate is held on the backside 1b or the edge 3 by the substrate transporter, because on the front side 1a sensitive structures already created on the substrate 1 can be present. The substrate transporter will hold the substrate 1 above the major surface 11, and the vacuum holder 19 will be moved by the actuator 17 toward that surface 11 up to the backside 1b in a direction perpendicular thereto. A vacuum is applied to the vacuum holder 19, such that the backside 1b of the substrate 1 is sucked to the vacuum holder 19. The substrate transporter is then released from the backside 1b of the substrate 1 [are] and moved away from the major surface 11. The actuator 17 retracts the holder 19 towards the major surface 11 in a direction substantially perpendicular to that surface 11, and gas is supplied to that surface 11 by the gas source 21 via the tube 23, the gas chamber 7 and the apertures 9. The gas creates a gas bearing between the substrate 1 and the major surface 11.

Page 10, delete the whole paragraph starting in line 8 and replace it with the following new paragraph:

As shown in figure 2b the gas source 21 can comprise a pump 31, gas ionizer 33, second controller 35 for temperature control of the gas, gas filter 37 and an air inlet 39. If the gas bearing is created with air, the air will enter the gas source 21 through the air inlet 39 and will be filtered by gas filter 37 so as to make the air substantially free of foreign particles. Thereafter the air will be brought to a required temperature by second controller 35, ionized by ionizer 33, brought to a required pressure by pump 31 and delivered through the tube 23 to the intermediate table 5. If a gas other than air is used the filter 37 and the inlet 39 may be absent. Gases such as nitrogen and helium can be used for this purpose. The gas ionizer 33 ionizes the gas used to create the gas bearing. The ions in the gas will be attracted by any static charge collected on the backside 1b of the substrate 1, and will neutralize such charge.

Page 11, delete the whole paragraph starting in line 4 and replace it with the following new paragraph:

B5  
In measuring the orientation of the substrate 1 on the intermediate table 5 the mark detector 29 can be used to detect a mark on the front side of the substrate 1a, and/or the edge

detector 27 can be used to detect the edge 3 of the substrate 1. The edge detector 27 measures the eccentricity of the substrate 1 on the intermediate table 5. This is accomplished by the actuator 17 which rotates the vacuum holder 19 around an axis perpendicular to the plane of the intermediate table such that the edge 3 of the substrate 1 rotates underneath the edge detector 27 (see Fig. 2c, which shows a plan view of the intermediate table 5 without a substrate positioned thereon). The edge detector 27 can employ a capacitive sensor or an optical sensor (e.g. a camera system or a CCD array) to measure the position of the edge 3 of the substrate 1. In this way:

Page 11, delete the whole paragraph starting in line 16 and replace it with the following new paragraph:

- It can be determined if the eccentricity of the substrate 1 upon the table 5 exceeds a threshold value which, when translated to the substrate table WT, would cause the substrate 1 to fail outside the capture range of the alignment module employed at the substrate table WT.

Page 12, delete the whole paragraph starting in line 17 and replace it with the following new paragraph:

Figure 4 shows a fourth embodiment of the invention in cross section. In this embodiment the gas bearing is relatively thick (i.e. larger than 150  $\mu\text{m}$ ). Gas will be supplied to the gas bearing from the gas source 21 through the tube 23, the gas chamber 7 and the apertures 9. If such a gas bearing is used the gas source 21 will advantageously be equipped with a second controller for directly controlling the temperature of said gas.

See the attached Appendix for the changes made to effect the above paragraph

# IN THE CLAIMS:

Please amend claims 5 and 12 as follows:

5. (Twice Amended) An apparatus according to claim 1 wherein said preparatory station comprises a temperature controller constructed and arranged to regulate a temperature of said gas.

12. (Twice Amended) A substrate preparing device comprising an intermediate

table on which a substrate can be positioned before transfer to a substrate table in a lithographic projection apparatus;

the intermediate table comprising a major surface provided with a plurality of apertures, and a gas bearing generator constructed and arranged to generate a gas bearing between said major surface and a substrate located thereon; and  
an ionizer constructed and arranged to ionize the gas.

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See the attached Appendix for the changes made to effect the above claim(s)